

A		CTB	
AB	aggregate base	CTPB	cement treated permeable base
ABBC	asbestos bonded bituminous coated	CTPM	cement treated permeable material
ABM	air-blown mortar	Culv	culvert
Abn	abandon	D	
Abut	abutment	D	depth
AC	asphalt concrete	Dbl	double
ACB	asphalt concrete base	DD	downdrain
ACP	asbestos cement pipe	Del	delineator
AFES	alternative flared end section	Det	detour or detail
Ahd	ahead	DF	Douglas Fir
Adj	adjust	DI	drainage inlet
Alt	alternate	Dia	diameter
AP	alternative pipe	Dist	distance
APC	alternative pipe culvert	DMBB	double metal beam barrier
APU	alternative pipe underdrain	Dr	drive
AS	aggregate subbase	DTBB	double thrie beam barrier
ASRP	aluminum spiral rib pipe	Dwy	driveway
Assy	assembly	E	
ATPB	asphalt treated permeable base	EA	each
ATPM	asphalt treated permeable material	Ease	easement
Ave	avenue	EB	end of bridge or eastbound

B		ECR	
BB	beginning of bridge	EC	end horizontal curve
BC	begin horizontal curve	EDC	end curb return
BCR	begin curb return	ED	edge drain
Beg	begin	EDC	edge drain cleanout
Bit Ctd	bituminous coated	EDO	edge drain outlet
Bk	back	EDV	edge drain vent
Bkf	backfill	Elev	elevation
Bldg	building	Emb	embankment
Bldv	boulevard	EP	edge of pavement
BM	bench mark	Eq	equation
Br	bridge	ES	edge of shoulder
BVC	begin vertical curve	ETW	edge of traveled way
BW	barbed wire	EVC	end vertical curve
		EW	endwall
		Exc	excavation
		Exist	existing
		Exp	expressway
		Exp Jt	expansion joint

C		F & C	
CAA	cable anchor assembly	Fdn	foundation
CAP	corrugated aluminum pipe	FEBT	facing eastbound traffic
CAPA	corrugated aluminum pipe arch	FNBT	facing northbound traffic
CAS	construction area sign	FSBT	facing southbound traffic
C-C	center to center	FWBT	facing westbound traffic
Chnl	channel	FES	flared end section
CIDH	cast-in-drilled-hole	FF	filter fabric
CIP	cast iron pipe	F & G	frame and grate
CIPCP	cast-in-place concrete pipe	FG	finished grade
CL	centerline	FH	fire hydrant
CL	chain link	FL	flow line
Cl	class	Fr Rd	frontage road
Clr	clear, clearance	Ftg	footing
Co	county	Fwy	freeway
Col	column	G	
Conc	concrete	Ga	gage
Cond	conduit	Galv	galvanized
Conn	connector	GP	grading plane
Const	construction()	GR	guard railing
Coord	coordinate		
Cr	creek		
CRSP	concreted rock slope protection		
CSP	corrugated steel pipe		
CSPA	corrugated steel pipe arch		

GSP galvanized steel pipe

H		I	
H	height, hour	IB	imported borrow
HD	horizontal drain	ID	inside diameter
Horiz	horizontal	Inv	invert
HP	hinge point	Irr	irrigation
HS	high strength	J	
HW	headwall	JP	joint pole
Hwy	highway	JS	junction structure
		Jt	joint

K		L	
KP	kilometer post	LCB	lean concrete base
		Lac	location
		LQL	layout line
		Ln	lane
		LS	lump sum
		Lt	left

M		Max	
MB	metal beam	MBB	metal beam barrier
MBGR	metal beam guard railing	Med	median
Mh	manhole	Mkr	marker
Min	minimum, minutes	Misc I&S	Misc I&S
Misc	Miscellaneous	Misc	Miscellaneous
Mod	modified or modify	Mon	monument
MP	metal plate	MPGR	metal plate guard railing
MR	movement rating	Mtl	material
Mtl	material		

N		NB	
NB	northbound	No.	number
NPS	nominal pipe size	NPS	nominal pipe size
Ø	nominal diameter		

O		Obli	
OC	overcrossing	OD	outside diameter
OG	original ground	OGAC	open graded asphalt concrete
OH	overhead		

P		PAP	
PB	pull box	PC	point of curvature
PC	point of curvature	PCC	point of compound curve or portland cement concrete
PCP	perforated concrete pipe	PCVC	point of compound vertical curve
Ped	pedestrian	Ped OC	pedestrian overcrossing
Ped UC	pedestrian undercrossing	Perm Mtl	permeable material
PG	profile grade	PI	point of intersection
PL, P/L	property line	PL, P/L	plate
PM	post mile	PN	paving notch
POC	point on horizontal curve	POT	point on tangent
POV	point on vertical curve	PP	power pole, plastic pipe
PP	perforated plastic pipe	PPL	perforated permeable liner
PRC	point of reverse curve	PRF	pavement reinforcing fabric
PRVC	point of reverse vertical curve	PSP	perforated steel pipe
PVC	polyvinyl chloride	Pvmt	pavement

R		RCA	
R	radius	RCB	reinforced concrete box
RCA	reinforced concrete arch	RCBP	reinforced concrete pipe
RCB	reinforced concrete box	RCPA	reinforced concrete pipe arch
R & D	remove and dispose	Rd	road
Rd	road	Reinf	reinforced or reinforcing
Rel	relocate	Ret	retaining
RM	road-mixed	RP	reference point
RR	railroad	R & S	remove and salvage
RSP	rock slope protection	Rt	right
Rte	route	RW	right of way

S		SAE	
SAE	structure approach embankment	Salv	salvage
SAPP	structural aluminum plate pipe	SB	southbound
SC	sand cushion	SC	station line
SCSP	slotted corrugated steel pipe or sacked concrete slope protection	SD	storm drain
SD	storm drain		structural section drain
	subgrade drain		subgrade drain
	section		section

Sep	separation	SV	water valve
SG	subgrade	SW	wing wall
Shld	shoulder		
Sht	sheet		
SI	International System of Units		
SM	selected material		
Spec	special		
SPP	slotted plastic pipe		
SS	slope stake		
SSBM	strap and saddle bracket method		
SSPA	structural steel plate arch		
SSPP	structural steel plate pipe		
SSPPA	structural steel plate pipe arch		
SSRP	steel spiral rib pipe		
St	street		
STA, Sta	station		
STBB	single thrie beam barrier		
Std	standard		
Str	structure		
Surf	surfacing		
SW	sidewalk or sound wall		
Swr	sewer		

T		TAB	
T	semi-tangent	TBB	thrie beam barrier
TAB	table	Tbr	timber
TBB	thrie beam barrier	TC	top of curb
Tbr	timber	TCB	traffic control box
TC	top of curb	Temp	temporary
TCB	traffic control box	TG	top of grate
Temp	temporary	TP	telephone pole
TG	top of grate	TPB	treated permeable base
TP	telephone pole	TPM	treated permeable material
TPB	treated permeable base	Trans	transition
TPM	treated permeable material	TS	traffic signal or tubular steel
Trans	transition	Typ	typical
TS	traffic signal or tubular steel	Typ Sec	typical section

U	
UC	undercrossing
UD	underdrain
UP	underpass
V	
V	design speed, valve
Var	variable
VC	vertical curve
VCP	vitrified clay pipe
Ver†	vertical
Via	viaduct

V		V	
V	design speed, valve	Var	variable
Var	variable	VC	vertical curve
VC	vertical curve	VCP	vitrified clay pipe
VCP	vitrified clay pipe	Vert	vertical
Vert	vertical	Via	viaduct
Via	viaduct		

W		W	
W	width	WB	westbound
WB	westbound	WH	weep hole
WH	weep hole	WM	wire mesh
WM	wire mesh	WSP	welded steel pipe
WSP	welded steel pipe		



DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
REGISTERED CIVIL ENGINEER July 1, 1999 PLANS APPROVAL DATE The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.					

SI PREFIXES		
SYMBOL	PREFIX	MULTIPLICATION FACTOR
m	milli-	10 <sup>-3</sup>
k	kilo-	10 <sup>3</sup>
M	mega-	10 <sup>6</sup>
G	giga-	10 <sup>9</sup>

METRIC UNITS (SI)	
SYMBOL	UNIT
m	meter
g	gram
s	second
A	ampere
°C	degrees Celsius
Hz	hertz
N	newton
Pa	pascal
L	liter
ha	hectare
W	Watt

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

## ABBREVIATIONS

NO SCALE